

Remarks

This Amendment is in response to the final Office Action dated **March 17, 2009**.

In the Office Action, claims 2, 3, 9-12, and 16 were rejected under 35 USC 102(b) as being anticipated by Dragan (5,676,543); claims 5-8 were rejected under 35 USC 103(a) as being unpatentable over Dragan (5,676,543); and claims 2, 3, 5-12 and 16-18 were rejected under 35 USC 103(a) as being unpatentable over Jensen et al (6,305,936) in view of Futami et al (4,778,832), Hare (5,661,222), Kamohara et al (6,291,546), Zech et al (6,677,393), Amstutz et al (4,559,013) and Kostner et al (4,204,324).

In response, applicants have made this amendment after final, which it requests be entered, as it is believed to place the application into condition for allowance.

Applicants have amended claims 10 and 17 to incorporate the step from claim 18, namely "**applying a liquid dental treatment to the tooth material.**" Furthermore, claim 10 was amended to require "applying the covering composition in a flowable state onto the gingiva around, **below** and **but** not onto the tooth material to be treated". This amendment is believed to eliminate the vagueness the Examiner alluded to, and more clearly distinguish over Dragan. Claim 18 was cancelled, as its limitations were incorporated into the independent claims 10 and 17.

§102 Rejection

Claim 10, and its dependent claims, as amended, is believed to distinguish over Dragan. Withdrawal of the anticipation rejection is respectfully requested.

§103 Rejections

The obviousness rejections are based on the Examiner's assumption that Jensen et al. teach applying a flowable composition to a patient's gums which rapidly cures in order to protect those gums from substances (e.g. bleaching agents) used on the teeth (page 6, lines 13-

15). However, Jensen et al. **do not** teach the application of a flowable composition in such a general manner. As stated in the previous official action, Jensen et al., however, refer to the application of methacrylates and other materials having similar properties. A-silicones, C-silicones and polyethers do not fulfil this condition. It is known that methacrylates are **hydrophilic** because methacrylates comprise ionic bonds and consequently, methacrylates adhere to gum covered by a film of moisture. Silicones, however, are known to comprise no ionic bonds and to be **strongly hydrophobic**. Consequently, the person of ordinary skill in the art would not have expected that silicones (hydrophilic) adhere well to the wet gums. So the teaching of Jensen et al. does not apply to flowable compositions in general including A-silicones, C-silicones or polyethers.

Futami et al., Hare et al., Kamohara et al. and Zech et al. only teach the use of A-silicones as **impression** material. They do not render the use of silicone in a method of isolating and **treating** tooth material obvious. This prior art does not provide any indication that silicones are suitable for use in the latter method.

Amstutz et al. teaches an orthodontic shield with indentions 9 from braces 2 and teeth 3 which fit against the braces 2 and teeth 3, holding the shield in place (col. 3, line 63, col. 4, line 1 and col. 5, lines 40-42 and col. 7, lines 12-15). Amstutz et al. does not give any indication that silicones can adhere to wet gums and isolate the gums from liquid dental treatment means.

Köstner et al. teaches a gum mask covering the necks of teeth exposed by gum atrophy (abstract, claim 1). The gum mask is safely held in place by the elasticity of the material and by the ridges of the material and by the ridges on the reverse side which fill in the gaps caused by bone decay and gum atrophy and closely embrace exposed necks and roots of the teeth (col. 1, line 52-59 and col. 2, lines 48-52, col. 3, line 49 to col. 4, line 2). There is no indication that the gum mask adheres to wet gums and isolates the gums from liquid dental treatment means.

So, Amstutz et al. and Köstner et al. only teach the use of silicone elastomers for shields and gum masks, which are held in place by positive engagement with teeth structure respectively braces mounted thereon. There is no indication in Amstutz et al. or Köstner et al. **that silicones could adhere to wet gums and isolate the gums from liquid dental treatment means.**

Consequently, the claimed invention of claims 2, 3, 5-12 and 16-17 is new and non-obvious over the prior art.

Claims 5-8, as presently amended, are not obvious over Dragan, because Dragan does not disclose all the elements of claim 10, and therefore also does not disclose all the elements of dependent claims 5-8.

Conclusion

Based on at least the above, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance of claims 2, 3, 5-12 and 16-17 is requested.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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